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| 35/08202 | DELGIZZO, RONALDE | 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427 | 1440218 | 2204 |

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EXAMINEE

DELGIZZO, RONALDE

APPLICANT

PAPER NUMBER

DATE MAILED 03/12/03

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,262

Applicant(s)

RANDALL

Examiner

De/Gizzi

Group Art Unit

2875

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **THREE** MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on

7/30/2001

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

☒ Claim(s)

1-38

Of the above claim(s)

NONE

is/are pending in the application.

is/are withdrawn from consideration.

Claim(s)

is/are allowed.

☒ Claim(s)

1-38

Claim(s)

is/are rejected.

is/are objected to.

Claim(s)

are subject to restriction or election requirement

Application Papers

The proposed drawing correction, filed on _____ is approved _____ disapproved.

The drawing(s) filed on _____ is/are objected to by the Examiner

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

All Some* None of the:

Certified copies of the priority documents have been received.

Certified copies of the priority documents have been received in Application No.

Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received:

Attachment(s)

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) **2**

Interview Summary, PTO-413

☒ Notice of Reference(s) Cited, PTO-892

Notice of Informal Patent Application, PTO-152

Notice of Draftsperson's Patent Drawing Review, PTO-948

Other

Office Action Summary

DETAILED ACTION

Claim Rejections - 35 USC § 102

1 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent

2 Claims 1-38 are rejected under 35 USC 102 (e) as anticipated by NAUM

3 Regarding Claim 1, NAUM discloses (Col 1, lines 7-15) and shows (Fig. 10) an illumination device comprising

 a light emitting diode (Col 3, lines 24, 43-55) that emits a radiation pattern, wherein a maximum luminous intensity of the radiation pattern is displaced relative to a center axis of the light emitting diode, and

 a number of light guides positioned to be illuminated by the light emitting diode (Col 5, lines 9-20), each light guide positioned at offset locations relative to the center axis of the light emitting diode

4 Regarding Claim 2, NAUM discloses and shows the illumination device of claim 1, wherein each light guide is positioned such that a cross-sectional center of each light guide substantially corresponds to locations of the maximum luminous intensity of the radiation pattern of the light emitting diode

5 Regarding Claim 3, NAUM discloses and shows the illumination device of claim 2, wherein the locations of the maximum luminous intensity of the radiation pattern of the light emitting diode

are substantially rotationally symmetric around the center axis of the light emitting diode

6 Regarding Claim 4, NAUM discloses and shows the illumination device of claim 1, wherein the number of light guides includes two light guides

7 Regarding Claim 5, NAUM discloses and shows the illumination device of claim 1, further comprising a light guide fixture formed to mate with the light guides, wherein the light guide fixture positions the light guides at the offset locations relative to the center axis of the light emitting diode

8 Regarding Claim 6, NAUM discloses and shows the illumination device of claim 5, wherein the light guide fixture is positioned adjacent the light emitting diode

9 Regarding Claim 7, NAUM discloses and shows the illumination device of claim 5, wherein the light guide fixture is a housing that houses the light emitting diode

10 Regarding Claim 8, NAUM discloses and shows the illumination device of claim 1, wherein at least one of the light guides provides directional side lighting in a first direction and wherein at least another of the light guides provides directional side lighting in a second direction

11 Regarding Claim 9, NAUM discloses (Col 1, lines 7-15) and shows (Fig 10) an illumination device comprising

 a light emitting diode (Col 3, lines 24, 43-55) that emits a radiation pattern, wherein a maximum luminous intensity of the radiation pattern is displaced relative to a center axis of the light emitting diode, and

 at least one light guide positioned to be illuminated by the light emitting diode, the light guide positioned at an offset location relative to the center axis of the light emitting diode

12 Regarding Claim 10, NAUM discloses and shows the illumination device of claim 1, wherein

the light guide is positioned such that a cross-sectional center of the light guide substantially corresponds to a location of the maximum luminous intensity of the radiation pattern of the light emitting diode

13 Regarding Claim 11, NAUM discloses and shows the illumination device of claim 9, further comprising a light guide fixture formed to mate with the light guide, wherein the light guide fixture positions the light guide at the offset location relative to the center axis of the light emitting diode

14 Regarding Claim 12, NAUM discloses and shows the illumination device of claim 11, wherein the light guide fixture is positioned adjacent the light emitting diode

15 Regarding Claim 13, NAUM discloses and shows the illumination device of claim 11, wherein the light guide fixture is a housing that houses the light emitting diode.

16 Regarding Claim 14, NAUM discloses (Col 1, lines 7-15) and shows an illumination device comprising a light emitting diode that emits a radiation pattern wherein a maximum luminous intensity of the radiation pattern is displaced relative to a center axis of the light emitting diode,

a light guide fixture, the light guide fixture formed to mate with light guides,

a first light guide having a first end mated with the light guide fixture, wherein the first end of the first light guide is positioned at a first offset location relative to the center axis of the light emitting diode,

a second light guide having a first end mated with the light guide fixture, wherein the first end of the second light guide is positioned at a second offset location relative to the center axis of the light emitting diode

17 Regarding Claim 15, NAUM discloses and shows the illumination device of claim 14

wherein the first end of the first light guide is positioned such that a cross-sectional center of the first light guide substantially corresponds to a first location of the maximum luminous intensity of the radiation pattern of the light emitting diode, and

wherein the first end of the second light guide is positioned such that a cross-sectional center of the second light guide substantially corresponds to a second location of the maximum luminous intensity of the radiation pattern of the light emitting diode

18 Regarding Claim 16, NAUM discloses and shows the illumination device of claim 15, wherein the first and second locations of the maximum luminous intensity of the radiation pattern of the light emitting diode are substantially rotationally symmetric around the center axis of the light emitting diode

19 Regarding Claim 17, NAUM discloses and shows the illumination device of claim 15, wherein the light guide fixture is positioned adjacent the light emitting diode

20 Regarding Claim 18, NAUM discloses and shows the illumination device of claim 15, wherein the light guide fixture is a housing that houses the light emitting diode

21 Regarding Claim 19, NAUM discloses and shows the illumination device of claim 15, wherein the light emitting diode is a first light emitting diode and the light guide fixture a first light guide fixture, the illumination device further comprising

a second light emitting diode that emits a radiation pattern wherein a maximum luminous intensity of the radiation pattern of the second light emitting diode is displaced relative to a center axis of the second light emitting diode,

a second light guide fixture, the second light guide fixture formed to mate with light guides

wherein the first light guide has a second end mated with the second light guide fixture, wherein the second end of the first light guide is positioned at a first offset location relative to the center axis of the second light emitting diode, and

wherein the second light guide has a second end mated with the second light guide fixture, wherein the second end of the second light guide is positioned at a second offset location relative to the center axis of the second light emitting diode

22 Regarding Claim 20, NAUM discloses and shows the illumination device of claim 19, wherein the first end of the first light guide is positioned such that a cross-sectional center of the first light guide substantially corresponds to a first location of the maximum luminous intensity of the radiation pattern of the first light emitting diode,

wherein the first end of the second light guide is positioned such that a cross-sectional center of the second light guide substantially corresponds to a second location of the maximum luminous intensity of the radiation pattern of the first light emitting diode,

wherein the second end of the first light guide is positioned such that a cross-sectional center of the first light guide substantially corresponds to a first location of the maximum luminous intensity of the radiation pattern of the second light emitting diode, and

wherein the second end of the second light guide is positioned such that a cross-sectional center of the second light guide substantially corresponds to a second location of the maximum luminous intensity of the radiation pattern of the second light emitting diode

23 Regarding Claim 21, NAUM discloses and shows the illumination device of claim 19, wherein the first light guide fixture is positioned adjacent the first light emitting diode, and wherein the second

light guide fixture is positioned adjacent the second light emitting diode

24 Regarding Claim 22, NAUM discloses and shows the illumination device of claim 19, wherein the first light guide fixture is a housing that houses the first light emitting diode, and wherein the second light guide fixture is a housing that houses the second light emitting diode

25 Regarding Claim 23, NAUM discloses and shows the illumination device of claim 15, wherein the first light guide provides directional side lighting in a first direction, and wherein the second light guide provides directional side lighting in a second direction

26 Regarding Claim 24, NAUM discloses and shows an illumination device comprising
a light emitting diode that emits a radiation pattern, wherein a maximum luminous intensity of the radiation pattern is displaced relative to a center axis of the light emitting diode,
a number of light guides, and
means for positioning each light guide at offset locations relative to the center axis of the light emitting diode.

27 Regarding Claim 25, NAUM discloses and shows the illumination device of claim 24, further comprising means for positioning each light guide such that a cross-sectional center of each light guide substantially corresponds to locations of the maximum luminous intensity of the radiation pattern of the light emitting diode

28 Regarding Claim 26, NAUM discloses and shows (Fig. 23c) a sign comprising
a frame,
a light emitting diode that emits a radiation pattern wherein a maximum luminous intensity of the radiation pattern is displaced relative to a center axis of the light emitting diode, wherein the

light emitting diode is housed within the frame, and

a number of light guides positioned to be illuminated by the light emitting diode, each light guide positioned at offset locations relative to the center axis of the light emitting diode, wherein the frame is formed with holes and the each light guide protrudes through at least one of the holes

29 Regarding Claim 27, NAUM discloses and shows the sign of claim 26, wherein each light guide is positioned such that a cross-sectional center of each light guide substantially corresponds to locations of the maximum luminous intensity of the radiation pattern of the light emitting diode

30 Regarding Claim 28, NAUM discloses and shows the sign of claim 26, wherein the locations of the maximum luminous intensity of the radiation pattern of the light emitting diode are substantially rotationally symmetric around the center axis of the light emitting diode

31 Regarding Claim 29, NAUM discloses and shows the sign of claim 26, wherein each light guide provides directional side lighting in a unique direction

32 Regarding Claim 30, NAUM discloses and shows (Fig 23c) a sign comprising
a frame;

a first light emitting diode that emits a radiation pattern wherein a maximum luminous intensity of the radiation pattern is displaced relative to a center axis of the first light emitting diode,

a first light guide fixture, the first light guide fixture formed to mate with light guides, wherein the first light emitting diode and the first light guide fixture are housed in the frame,

a first light guide having a first end mated with the first light guide fixture, wherein the first end of the first light guide is positioned at a first offset location relative to the center axis of the light emitting diode,

a second light guide having a first end mated with the first light guide fixture, wherein the first end of the second light guide is positioned at a second offset location relative to the center axis of the first light emitting diode,

a second light emitting diode that emits a radiation pattern wherein a maximum luminous intensity of the radiation pattern is displaced relative to a center axis of the second light emitting diode, and

a second light guide fixture, the second light guide fixture formed to mate with light guides, wherein the first light guide has a second end mated with the second light guide fixture, wherein the second end of the first light guide is positioned at a first offset location relative to the center axis of the second light emitting diode,

wherein the second light guide has a second end mated with the second light guide fixture, wherein the second end of the second light guide is positioned at a second offset location relative to the center axis of the second light emitting diode, and

wherein the frame is formed with holes and wherein the first and second light guides pass through the holes

33 Regarding Claim 31, NAUM discloses and shows the sign of claim 30, wherein the first and second light guides are positioned such that a cross-sectional center of each light guide substantially corresponds to locations of the maximum luminous intensity of the radiation pattern of each of the light emitting diodes

34 Regarding Claim 32, NAUM discloses and shows the sign of claim 31, wherein the locations of the maximum luminous intensity of the radiation pattern of the light emitting diode are substantially

rotationally symmetric around the center axis of the light emitting diode

35 Regarding Claim 33, NAUM discloses and shows a method comprising

positioning a number of light guides next to a light emitting diode that emits a radiation pattern wherein a maximum luminous intensity of the radiation pattern is displaced relative to a center axis of the light emitting diode, each light guide being positioned at offset locations relative to the center axis of the light emitting diode, and

illuminating the light guides with the light emitting diode

36 Regarding Claim 34, NAUM discloses and shows the method of claim 33, further comprising

positioning each light guide such that a cross-sectional center of each light guide substantially corresponds to locations of the maximum luminous intensity of the radiation pattern of the light emitting diode

37 Regarding Claim 35, NAUM discloses and shows a sign (Fig. 23c) comprising

a frame,

a light emitting diode housed within the frame,

a first light guide positioned to be illuminated by the light emitting diode, wherein the first light guide provides directional side lighting in a first direction, and

a second light guide positioned to be illuminated by the light emitting diode, wherein the second light guide provides directional side lighting in a second direction

38 Regarding Claim 36, NAUM discloses and shows the sign of claim 35, wherein the frame is formed with holes and the each light guide protrudes through at least one of the holes

39 Regarding Claim 37, NAUM discloses and shows the sign of claim 35, wherein the light

emitting diode is a first light emitting diode, the sign further comprising a second light emitting diode housed within the frame, wherein the first and second light guides are positioned to be illuminated by the second light emitting diode

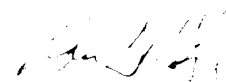
40 Regarding Claim 38, NAUM discloses and shows the sign of claim 35, wherein the first and second light guides provide lighting in different colors

Conclusion

41 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald E. DelGizzi, Mon-Thurs, 0730 to 1800 EST at (703) 305-0648, or to Sandra O'Shea, Supervisory Patent Examiner, Mon-Fri, at (703) 305-4939, or to the receptionist at (703) 308-0956 (phone) or at either fax # (703) 305-3431 or fax # (703) 308-7724

rdg

Mar 22, 2003



Ronald E. DelGizzi

Patent Examiner, Art Unit 2875